Author Index of Volume 222

Abstreiter, G., 15, 20, 27, 150, 227, 246, 269
Adams, J. C., 200
Atkinson, A., 161
Auvray, P., 85

Baither, D., 57
Baribeau, J.-M., 98
Bauer, G., 251
Bean, J. C., 120
Beavis, A. W., 205
Beck, E., 126
Benyattou, T., 60
Berbezier, I., 52
Bethea, C. G., 120
Bitz, C. M., 254
Boyd, L. W., 145
Bremond, G., 60
Brighten, J. C., 116
Brunner, J., 27, 227
Bugiel, E., 34
Butz, R., 104
Buxbaum, A., 157, 180

Caline, R. T., 73
Capano, M. A., 46
Cardona, M., 246
Caymax, M., 166
Chambers, S. A., 200
Chroboczek, J. A., 85
Clauws, P., 166
Corni, F., 176
Craciun, V., 145
Cullis, A. G., 78

Decarreau, A., 189
Denzel, J., 89
Dettmer, K., 234
Dieker, C., 5
Dommann, A., 126
Dutartre, D., 52, 60, 85

Eberl, K., 246, 269
Ehrhart, P., 221
Eizenberg, M., 157, 180
Eldelman, F., 57
Emeleus, C. J., 24
Engvall, J., 154, 237, 243
Evrard, P., 73

Freiss, E., 27, 150, 227
Fromherz, T., 251
Fujiwara, A., 1
Fukatsu, S., 1

Gail, M., 27, 227
Gornik, E., 20
Grauby, O., 189
Gravesteijn, D. J., 132, 145
Greve, D. W., 46
Grimmeiss, H. G., 154, 237, 243, 265
Gruhle, A., 137

Hagon, P. J., 205
Hansson, G. V., 42
Hartnagel, H. L., 38
Hauser, N., 173
Hawkins, I. D., 116
Hazemann, J. L., 189
Heigl, G., 184
Helm, M., 251
Hemment, P. L. F., 141
Hertle, H., 20
Herzog, H.-J., 10, 89, 94
Heydenreich, J., 57
Houghton, D. C., 98
Hulse, J., 69
Humlíček, J., 246

Ito, R., 1
Iyer, S. S., 57

Jagadish, C., 173
Jäger, W., 221
Jain, S. C., 161
Jaros, M., 205
Jesson, D. E., 98
Joyce, B. A., 108

Kamins, T. I., 30
Kampers, S., 104
Kasper, E., 10, 89, 94, 137, 154, 184, 221, 227, 237, 243, 246, 251, 254, 259, 265, 269
Kearney, M. J., 24
Kersten, W. J., 132, 145
Kibbel, H., 89, 94, 137, 215, 221, 227, 237, 243, 246, 251, 265, 269
Kidder, Jr., J. N., 200
Kircher, R., 38
Komem, Y., 57
Kozlowski, F., 196
Krüger, D., 34
Kubiak, R. A., 24, 116
Kühne, H., 24
Kyoya, K., 112

Lach, J., 200
Lang, W., 196
Le Meur, Y., 180
Leifer, K., 221
Leong, W. Y., 78
Lukes, F., 246
Lüth, H., 5

Maeda, T., 38
Mantz, U., 94
Martin, F., 189
Matsuhata, H., 112
McLaughlin, G., 46
Meier, F., 150
Menczigar, U., 27, 227
Meyer, D. J., 30
Meyer, F., 180
Miki, K., 112
Miloszewski, A., 205
Misra, R., 46
Mokler, S. M., 108
Möller, P., 180
Morgenstern, Th., 34
Murota, J., 38

Nagesh, V., 154, 237, 265
Newstead, S. M., 141
Ni, W.-X., 42
Noack, Y., 189
Noël, J.-P., 69
Nosho, B. Z., 200
Nützel, J. F., 150

Ohtani, N., 108
Olajos, J., 237, 243
Ono, S., 38
Ottaviani, G., 176
Oyanagi, H., 112

Pantel, R., 85
Parker, E. H. C., 24, 116, 141
Peaker, A. R., 116
Pearsall, T. P., 200, 254, 259
Pellet, C., 180
Pennycook, S. J., 98
People, R., 120
Perret, P., 52
Pesting, H., 246
Peticolas, L. J., 120
Petit, S., 189
Phillips, P. J., 116
Pickering, C., 73
Pidduck, A. J., 78
Pinnington, T., 259
Pitt, A. M., 78
Pixley, R. E., 126
Polatoglou, H. M., 209, 212
Pollak, F. H., 85
Poortmans, J., 166
Powell, A. R., 141
Presting, H., 215, 221, 227, 237, 243, 254, 259, 265
Priolo, F., 176
Pruijmboom, A., 132

Radpisheh, H., 42
Raizman, A., 180
Ramm, J., 126
Reader, A. H., 132, 145
Richter, A., 196
Ritter, G., 34
Robbins, D. J., 78
Rolfe, S., 69
Rowell, N., 69

Sakamoto, K., 112
Sakamoto, T., 112
Sanderson, A., 259
Sandmaier, H., 196
Sardela, Jr., M. R., 42

Sauer, R., 10, 89, 94
Sauter, M., 196
Schäffler, F., 10, 15, 20, 94, 157
Schlesinger, T. E., 46
Schmid, U., 246
Schmidt, K., 5
Schorer, R., 269
Schreiber, H.-U., 154
Schütz, R., 38
Schwartz, D. T., 200
Schwebel, C., 180
Servidori, M., 176
Shiraki, Y., 1
Slotboom, J., 132
Smith, D. W., 24
Sorensen, L. B., 254
Souifi, A., 60
Span, G., 184
Spitzer, J., 89
Sputz, S. K., 120
Stehle, J. L., 73
Steiner, P., 196
Stenkamp, D., 221
Svensson, B. G., 173
Sybertz, W., 221

Takahashi, Y., 1
Tang, H. P., 5
Theodorou, G., 209, 212
Thonke, K., 10, 89, 94
Tiedje, T., 259
Timmers, J., 145
Többen, D., 15
Tonini, R., 176
Trauwaert, M.-A., 166
Tserbak, C., 209, 212
Turton, R. J., 205

Usami, N., 1

Vanhellemont, J., 166
Vescan, L., 5
Vescan, T., 5
van Rooij-Mulder, J. M. L., 132
Wachter, M., 10
Warren, P., 52
Weber, J., 234
Wegscheider, W., 246, 269
Whall, T. E., 24, 116, 141
Williams, J. S., 173
Williams, P. S., 200
Wong, K. B., 205

Yamaguchi, H., 112
Yin, Y., 85
Yokoo, K., 38
Yoshida, H., 1

Zaumseil, P., 34
Zhang, J., 108
Zhang, J. P., 141
Zolotoyabko, E., 157
Zrenner, A., 15, 20
Züger, A., 126

Subject Index of Volume 222

Alloys
  photoluminescence and electrical characterization of SiGe/Si heterostructures grown by rapid thermal chemical vapour deposition, 60

Band structure
  band-to-band transitions in strain-symmetrized, short-period Si/Ge superlattices, 243
  photoreflectance study of strained (001) $Si_{1-x}Ge_x$/Si layers, 85
Boron
  comparative study of heavy boron doping in silicon and $Si_{1-x}Ge_x$ layers grown by molecular beam epitaxy, 42

Chemical vapour deposition
  chemical vapour deposition of epitaxial SiGe thin films from SiH_4–GeH_4–HCl–H_2 gas mixtures in an atmospheric pressure process, 34
  low temperature silicon and $Si_{1-x}Ge_x$ epitaxy by rapid thermal chemical vapour deposition using hydrides, 52
  photoluminescence of SiGe/Si quantum wells prepared by LPCVD, 5
  Si/SiGe/Si heterostructure growth without interface roughness at high germanium mole fractions by low temperature low pressure chemical vapour deposition, 38
Conductivity
  in-plane and vertical high-frequency conductivity in Si/Ge short-period superlattices, 251

Depth profiling
  photoluminescence and electrical characterization of SiGe/Si heterostructures grown by rapid thermal chemical vapour deposition, 60

Elastic properties
  elastic strain energy of graded $Si_{1-x}Ge_x$ buffer layers, 184
Electrical properties and measurements
  1 MeV electron irradiation induced degradation of boron-doped strained $Si_{1-x}Ge_x$ layers, 166
  boron-doped Si/Ge superlattices and heterostructures, 150
  deep level transient spectroscopy study of defects in megaelectronvolt germanium ion implanted silicon, 173
  electrical assessment of p-isotype Si/SiGe/Si heterostructures grown by MBE, 116
  electrical characterization of Si–Ge heterostructure bipolar transistors, 154
  electroluminescent performance of porous silicon, 196
  magnetotransport studies of remote doped Si/$Si_{1-x}Ge_x$ heterostructures grown on relaxed SiGe buffer layers, 15
  molecular beam epitaxy grown Si/$Si_{0.87}Ge_{0.13}$ heterojunction bipolar transistors with ideal I–V characteristics, 132
Electron microscopy
  atomistic processes of surface segregration during Si–Ge MBE growth, 98
  crystallization of amorphous Ge_xSi_{1-x} films on SiO_2, 57
Electronic devices
  1 MeV electron irradiation induced degradation of boron-doped strained $Si_{1-x}Ge_x$ layers, 166
  50 GHz $Si_{1-x}Ge_x$ heterobipolar transistor: growth of the complete layer sequence by molecular beam epitaxy, 137
  Si/Ge superlattice embedded in silicon and germanium: electronic structure and transition probabilities, 212
Ellipsometry
  characterization of SiGe multiple quantum wells by spectroscopic ellipsometry and photoluminescence, 69
  SiGe materials characterized by high resolution Raman spectroscopy and spectroscopic ellipsometry, 73
Epitaxy
  crystallization kinetics of boron- and germanium-implanted ⟨100⟩ Si: a balance between doping and strain effects, 176
  deposition of Si–Ge strained layers from GeH_4, SiH_2Cl_2, SiH_4 and Si_2H_6, 30
  energy of systems of misfit dislocations in epitaxial strained layers, 161
  evolution of surface morphology and strain during SiGe epitaxy, 78
  low temperature silicon and $Si_{1-x}Ge_x$ epitaxy by rapid thermal chemical vapour deposition using hydrides, 52
  low-temperature *in situ* cleaning of silicon wafers with an ultra high vacuum compatible plasma source, 126
  Si/SiGe/Si heterostructure growth without interface roughness at high germanium mole fractions by low temperature low pressure chemical vapour deposition, 38

Etching
  low-temperature *in situ* cleaning of silicon wafers with an ultra high vacuum compatible plasma source, 126

Fourier transform infrared spectroscopy
  band-to-band transitions in strain-symmetrized, short-period Si/Ge superlattices, 243
  electron intersubband absorption in modulation and well-doped Si/$Si_{1-x}Ge_x$ multiple quantum wells, 20
  experimental study of Si–Ge tetrahedral solid solution in Ni–Co–Mg talcs, 189
  in-plane and vertical high-frequency conductivity in Si/Ge short-period superlattices, 251
  normal incidence hole intersubband quantum well infrared photodetectors in pseudomorphic Ge_xSi_{1-x}/Si, 120

Germanium
  50 GHz $Si_{1-x}Ge_x$ heterobipolar transistor: growth of the complete layer sequence by molecular beam epitaxy, 137
  ambient pressure scanning tunneling microscope imaging of hydrogen-passivated Si/Ge multilayers, 259
  atomistic processes of surface segregation during Si–Ge MBE growth, 98
  band gap luminescence in pseudomorphic $Si_{1-x}Ge_x$ quantum wells grown by molecular beam epitaxy, 27
  boron-doped Si/Ge superlattices and heterostructures, 150
  buffer concepts of ultrathin Si_mGe_n superlattices, 215
  characterization of SiGe multiple quantum wells by spectroscopic ellipsometry and photoluminescence, 69
  chemical vapour deposition of epitaxial SiGe thin films from SiH_4–GeH_4–HCl–H_2 gas mixtures in an atmospheric pressure process, 34
  crystallization of amorphous Ge_xSi_{1-x} films on SiO_2, 57
  deep level transient spectroscopy study of defects in megaelectronvolt germanium ion implanted silicon, 173
  differential optical absorption spectroscopy and X-ray characterization of symmetrically strained Ge–Si superlattices, 254

effect of a surfactant on the growth of Si/Ge heterostructures, 112
electrical characterization of Si-Ge heterostructure bipolar transistors, 154
electron intersubband absorption in modulation and well-doped $Si/Si_{1-x}Ge_x$ multiple quantum wells, 20
evolution of surface morphology and strain during SiGe epitaxy, 78
experimental study of Si–Ge tetrahedral solid solution in Ni–Co–Mg talcs, 189
germanium segregation induced reconstruction of SiGe layers deposited on Si(100), 104
in-plane Raman scattering of [001]-grown Si/Ge superlattices, 269
magnetotransport studies of remote doped $Si/Si_{1-x}Ge_x$ heterostructures grown on relaxed SiGe buffer layers, 15
molecular beam epitaxy grown $Si/Si_{0.87}Ge_{0.13}$ heterojunction bipolar transistors with ideal $I-V$ characteristics, 132
normal incidence hole intersubband quantum well infrared photodetectors in pseudomorphic Ge_xSi_{1-x}/Si, 120
optical transitions in strained Ge/Si superlattices, 246
photoluminescence from short-period strained-layer superlattices of $(Si_6Ge_4)_p$ after hydrogen passivation, 234
photoluminescence studies of $Si/Si_{1-x}Ge_x$ quantum wells and Si_mGe_n superlattices, 227
photoreflectance study of strained (001) $Si_{1-x}Ge_x/Si$ layers, 85
systematic blue shift of exciton luminescence in strained $Si_{1-x}Ge_x/Si$ quantum well structures grown by gas source silicon molecular beam epitaxy, 1
deposition of Si–Ge strained layers from GeH_4, SiH_2Cl_2, SiH_4 and Si_2H_6, 30
electrical assessment of p-isotype Si/SiGe/Si heterostructures grown by MBE, 116
UV-assisted oxidation of SiGe strained layers, 145

Growth mechanism
chemical vapour deposition of epitaxial SiGe thin films from $SiH_4-GeH_4-HCl-H_2$ gas mixtures in an atmospheric pressure process, 34
stress in $Si_{1-x}Ge_x$ films prepared by ion beam sputtering: origin and relaxation, 180

Hall effect
magnetotransport studies of remote doped $Si/Si_{1-x}Ge_x$ heterostructures grown on relaxed SiGe buffer layers, 15

Heterostructures
band edge and deep level photoluminescence of fully strained $Si_{1-x}Ge_x/Si$ alloys, 89
band gap luminescence in pseudomorphic $Si_{1-x}Ge_x$ quantum wells grown by molecular beam epitaxy, 27
deposition of Si–Ge strained layers from GeH_4, SiH_2Cl_2, SiH_4 and Si_2H_6, 30
electrical characterization of Si-Ge heterostructure bipolar transistors, 154
energy of systems of misfit dislocations in epitaxial strained layers, 161
hole transport in $Si_{0.8}Ge_{0.2}$ quantum wells at low temperatures, 24
photoluminescence of confined excitons in MBE-grown $Si_{1-x}Ge_x/Si(100)$ single quantum wells, 10
Si/SiGe/Si heterostructure growth without interface roughness at high germanium mole fractions by low temperature low pressure chemical vapour deposition, 38
strain relaxation in epitaxial $Si_{1-x}Ge_x/Si(100)$ layers induced by reaction with palladium, 157

High energy electron diffraction
temperature-dependent growth anisotropy observed on Si(001) surfaces during silicon gas source molecular beam epitaxy using disilane, 108

Impurities
optical and electrical characterization of Si/Ge superlattices, 237

Inorganic compounds
experimental study of Si–Ge tetrahedral solid solution in Ni–Co–Mg talcs, 189

Interfaces
characterization of short-period Si_mGe_n superlattices by high-resolution transmission electron microscopy and X-ray diffraction, 221
strain relaxation in epitaxial $Si_{1-x}Ge_x/Si(100)$ layers induced by reaction with palladium, 157

Ion bombardment
stress in $Si_{1-x}Ge_x$ films prepared by ion beam sputtering: origin and relaxation, 180

Ion implantation
crystallization kinetics of boron- and germanium-implanted $\langle 100 \rangle$ Si: a balance between doping and strain effects, 176
deep level transient spectroscopy study of defects in megaelectronvolt germanium ion implanted silicon, 173
strain relaxation in epitaxial $Si_{1-x}Ge_x/Si(100)$ layers induced by reaction with palladium, 157

Luminescence
band edge and deep level photoluminescence of fully strained $Si_{1-x}Ge_x/Si$ alloys, 89
band gap luminescence in pseudomorphic $Si_{1-x}Ge_x$ quantum wells grown by molecular beam epitaxy, 27
electroluminescent performance of porous silicon, 196
observation of electroluminescence from pseudomorphic $Si_{1-x}Ge_x$ alloy layers, 94
photoluminescence and electrical characterization of SiGe/Si heterostructures grown by rapid thermal chemical vapour deposition, 60
photoluminescence and X-ray diffraction study of highly uniform silicon and Ge_xSi_{1-x} epitaxial layers, 46
photoluminescence from short-period strained-layer superlattices of $(Si_6Ge_4)_p$ after hydrogen passivation, 234
photoluminescence of confined excitons in MBE-grown $Si_{1-x}Ge_x/Si(100)$ single quantum wells, 10
photoluminescence studies of $Si/Si_{1-x}Ge_x$ quantum wells and Si_mGe_n superlattices, 227
systematic blue shift of exciton luminescence in strained $Si_{1-x}Ge_x/Si$ quantum well structures grown by gas source silicon molecular beam epitaxy, 1

Metallization
strain relaxation in epitaxial $Si_{1-x}Ge_x/Si(100)$ layers induced by reaction with palladium, 157

Molecular beam epitaxy
50 GHz $Si_{1-x}Ge_x$ heterobipolar transistor: growth of the complete layer sequence by molecular beam epitaxy, 137
atomistic processes of surface segregation during Si–Ge MBE growth, 98
band edge and deep level photoluminescence of fully strained $Si_{1-x}Ge_x/Si$ alloys, 89
band gap luminescence in pseudomorphic $Si_{1-x}Ge_x$ quantum wells grown by molecular beam epitaxy, 27
boron-doped Si/Ge superlattices and heterostructures, 150
buffer concepts of ultrathin Si_mGe_n superlattices, 215

comparative study of heavy boron doping in silicon and $Si_{1-x}Ge_x$ layers grown by molecular beam epitaxy, 42
effect of a surfactant on the growth of Si/Ge heterostructures, 112
molecular beam epitaxy grown $Si/Si_{0.87}Ge_{0.13}$ heterojunction bipolar transistors with ideal $I-V$ characteristics, 132
observation of electroluminescence from pseudomorphic $Si_{1-x}Ge_x$ alloy layers, 94
photoluminescence of confined excitons in MBE-grown $Si_{1-x}Ge_x$/Si(100) single quantum wells, 10
systematic blue shift of exciton luminescence in strained $Si_{1-x}Ge_x$/Si quantum well structures grown by gas source silicon molecular beam epitaxy, 1
temperature-dependent growth anisotropy observed on Si(001) surfaces during silicon gas source molecular beam epitaxy using disilane, 108

Monolayers
observation of electroluminescence from pseudomorphic $Si_{1-x}Ge_x$ alloy layers, 94

Multilayers
ambient pressure scanning tunneling microscope imaging of hydrogen-passivated Si/Ge multilayers, 259
electronic properties of strained Si/Ge superlattices: tight binding approach, 209

Nanostructures
electroluminescent performance of porous silicon, 196
electronic properties of strained Si/Ge superlattices: tight binding approach, 209

Optical properties
band-to-band transitions in strain-symmetrized, short-period Si/Ge superlattices, 243
optical transitions in strained Ge/Si superlattices, 246
photocapacitance studies of short-period Si/Ge superlattices, 265
photoluminescence and electrical characterization of SiGe/Si heterostructures grown by rapid thermal chemical vapour deposition, 60
photoluminescence of SiGe/Si quantum wells prepared by LPCVD, 5
Si/Ge superlattice embedded insilicon and germanium: electronic structure and transition probabilities, 212

Optical spectroscopy
differential optical absorption spectroscopy and X-ray characterization of symmetrically strained Ge–Si superlattices, 254
optical and electrical characterization of Si/Ge superlattices, 237
photoreflectance study of strained (001) $Si_{1-x}Ge_x$/Si layers, 85

Oxidation
comparison of the behaviour of $Si_{0.5}Ge_{0.5}$ alloy during dry and wet oxidation, 141
UV-assisted oxidation of SiGe strained layers, 145

Photocapacitance
photocapacitance studies of short-period Si/Ge superlattices, 265

Photoconductivity
quantitative theory of optical properties of Si-Ge heterostructures, 205

Photoluminescence
bright visible photoluminescence in thin silicon films, 200

Plasma processing and deposition
low-temperature *in situ* cleaning of silicon wafers with an ultra high vacuum compatible plasma source, 126

Quantum effects
electron intersubband absorption in modulation and well-doped $Si/Si_{1-x}Ge_x$ multiple quantum wells, 20
hole transport in $Si_{0.8}Ge_{0.2}$ quantum wells at low temperatures, 24
normal incidence hole intersubband quantum well infrared photodetectors in pseudomorphic Ge_xSi_{1-x}/Si, 120
photoluminescence and X-ray diffraction study of highly uniform silicon and Ge_xSi_{1-x} epitaxial layers, 46
photoluminescence of SiGe/Si quantum wells prepared by LPCVD, 5

Radiation damage
1 MeV electron irradiation induced degradation of boron-doped strained $Si_{1-x}Ge_x$ layers, 166

Raman scattering
in-plane Raman scattering of [001]-grown Si/Ge superlattices, 269

Raman spectroscopy
SiGe materials characterized by high resolution Raman spectroscopy and spectroscopic ellipsometry, 73

Resistivity
hole transport in $Si_{0.8}Ge_{0.2}$ quantum wells at low temperatures, 24

Rutherford backscattering spectroscopy
comparison of the behaviour of $Si_{0.5}Ge_{0.5}$ alloy during dry and wet oxidation, 141

Scanning tunnelling microscopy
ambient pressure scanning tunneling microscope imaging of hydrogen-passivated Si/Ge multilayers, 259

Segregation
comparative study of heavy boron doping in silicon and $Si_{1-x}Ge_x$ layers grown by molecular beam epitaxy, 42

Semiconductors
1 MeV electron irradiation induced degradation of boron-doped strained $Si_{1-x}Ge_x$ layers, 166
band edge and deep level photoluminescence of fully strained $Si_{1-x}Ge_x$/Si alloys, 89
in-plane and vertical high-frequency conductivity in Si/Ge short-period superlattices, 251
observation of electroluminescence from pseudomorphic $Si_{1-x}Ge_x$ alloy layers, 94
quantitative theory of optical properties of Si-Ge heterostructures, 205

Silicon
50 GHz $Si_{1-x}Ge_x$ heterobipolar transistor: growth of the complete layer sequence by molecular beam epitaxy, 137
ambient pressure scanning tunneling microscope imaging of hydrogen-passivated Si/Ge multilayers, 259
atomistic processes of surface segregation during Si–Ge MBE growth, 98
boron-doped Si/Ge superlattices and heterostructures, 150
bright visible photoluminescence in thin silicon films, 200
buffer concepts of ultrathin Si_mGe_n superlattices, 215
characterization of SiGe multiple quantum wells by spectroscopic ellipsometry and photoluminescence, 69
Chemical vapour deposition of epitaxial SiGe thin films from $SiH_4-GeH_4-HCl-H_2$ gas mixtures in an atmospheric pressure process, 34
comparative study of heavy boron doping in silicon and $Si_{1-x}Ge_x$ layers grown by molecular beam epitaxy, 42
crystallization of amorphous Ge_xSi_{1-x} films on SiO_2, 57
deep level transient spectroscopy study of defects in megaelectronvolt germanium ion implanted silicon, 173

deposition of Si–Ge strained layers from GeH_4, SiH_2Cl_2, SiH_4 and Si_2H_6, 30
differential optical absorption spectroscopy and X-ray characterization of symmetrically strained Ge–Si superlattices, 254
effect of a surfactant on the growth of Si/Ge heterostructures, 112
elastic strain energy of graded $Si_{1-x}Ge_x$ buffer layers, 184
electrical assessment of p-isotype Si/SiGe/Si heterostructures grown by MBE, 116
electrical characterization of Si-Ge heterostructure bipolar transistors, 154
electroluminescent performance of porous silicon, 196
electron intersubband absorption in modulation and well-doped $Si/Si_{1-x}Ge_x$ multiple quantum wells, 20
electronic properties of strained Si/Ge superlattices: tight binding approach, 209
energy of systems of misfit dislocations in epitaxial strained layers, 161
evolution of surface morphology and strain during SiGe epitaxy, 78
germanium segregation induced reconstruction of SiGe layers deposited on Si(100), 104
hole transport in $Si_{0.8}Ge_{0.2}$ quantum wells at low temperatures, 24
in-plane Raman scattering of [001]-grown Si/Ge superlattices, 269
low temperature silicon and $Si_{1-x}Ge_x$ epitaxy by rapid thermal chemical vapour deposition using hydrides, 52
low-temperature *in situ* cleaning of silicon wafers with an ultra high vacuum compatible plasma source, 126
magnetotransport studies of remote doped $Si/Si_{1-x}Ge_x$ heterostructures grown on relaxed SiGe buffer layers, 15
normal incidence hole intersubband quantum well infrared photodetectors in pseudomorphic Ge_xSi_{1-x}/Si, 120
optical and electrical characterization of Si/Ge superlattices, 237
optical transitions in strained Ge/Si superlattices, 246
photoluminescence from short-period strained-layer superlattices of $(Si_6Ge_4)_p$ after hydrogen passivation, 234
photoluminescence of confined excitons in MBE-grown $Si_{1-x}Ge_x/Si(100)$ single quantum wells, 10
photoluminescence studies of $Si/Si_{1-x}Ge_x$ quantum wells and Si_mGe_n superlattices, 227
photoreflectance study of strained (001) $Si_{1-x}Ge_x/Si$ layers, 85
quantitative theory of optical properties of Si-Ge heterostructures, 205
stress in $Si_{1-x}Ge_x$ films prepared by ion beam sputtering: origin and relaxation, 180
systematic blue shift of exciton luminescence in strained $Si_{1-x}Ge_x/Si$ quantum well structures grown by gas source silicon molecular beam epitaxy, 1
temperature-dependent growth anisotropy observed on Si(001) surfaces during silicon gas source molecular beam epitaxy using disilane, 108
UV-assisted oxidation of SiGe strained layers, 145

Silicon dioxide
crystallization of amorphous Ge_xSi_{1-x} films on SiO_2, 57

Silicon oxide
comparison of the behaviour of $Si_{0.5}Ge_{0.5}$ alloy during dry and wet oxidation, 141
UV-assisted oxidation of SiGe strained layers, 145

Silicon–germanium
photoluminescence and X-ray diffraction study of highly uniform silicon and Ge_xSi_{1-x} epitaxial layers, 46

Solid phase epitaxy
crystallization kinetics of boron- and germanium-implanted ⟨100⟩ Si: a balance between doping and strain effects, 176

Stress
crystallization kinetics of boron- and germanium-implanted ⟨100⟩ Si: a balance between doping and strain effects, 176
energy of systems of misfit dislocations in epitaxial strained layers, 161
stress in $Si_{1-x}Ge_x$ films prepared by ion beam sputtering: origin and relaxation, 180

Superlattices
atomistic processes of surface segregation during Si–Ge MBE growth, 98
band-to-band transitions in strain-symmetrized, short-period Si/Ge superlattices, 243
buffer concepts of ultrathin Si_mGe_n superlattices, 215
characterization of SiGe multiple quantum wells by spectroscopic ellipsometry and photoluminescence, 69
characterization of short-period Si_mGe_n superlattices by high-resolution transmission electron microscopy and X-ray diffraction, 221
differential optical absorption spectroscopy and X-ray characterization of symmetrically strained Ge–Si superlattices, 254
electronic properties of strained Si/Ge superlattices: tight binding approach, 209
in-plane and vertical high-frequency conductivity in Si/Ge short-period superlattices, 251
in-plane Raman scattering of [001]-grown Si/Ge superlattices, 269
low temperature silicon and $Si_{1-x}Ge_x$ epitaxy by rapid thermal chemical vapour deposition using hydrides, 52
optical and electrical characterization of Si/Ge superlattices, 237
optical transitions in strained Ge/Si superlattices, 246
photocapacitance studies of short-period Si/Ge superlattices, 265
photoluminescence from short-period strained-layer superlattices of $(Si_6Ge_4)_p$ after hydrogen passivation, 234
photoluminescence studies of $Si/Si_{1-x}Ge_x$ quantum wells and Si_mGe_n superlattices, 227
quantitative theory of optical properties of Si–Ge heterostructures, 205
Si/Ge superlattice embedded in silicon and germanium: electronic structure and transition probabilities, 212
SiGe materials characterized by high resolution Raman spectroscopy and spectroscopic ellipsometry, 73

Surface diffusion
temperature-dependent growth anisotropy observed on Si(001) surfaces during silicon gas source molecular beam epitaxy using disilane, 108

Surface morphology
evolution of surface morphology and strain during SiGe epitaxy, 78

Surface roughness
Si/SiGe/Si heterostructure growth without interface roughness at high germanium mole fractions by low temperature low pressure chemical vapour deposition, 38

Surface segregation
atomistic processes of surface segregation during Si–Ge MBE growth, 98
effect of a surfactant on the growth of Si/Ge heterostructures, 112

germanium segregation induced reconstruction of SiGe layers deposited on Si(100), 104
Surface structure
germanium segregation induced reconstruction of SiGe layers deposited on Si(100), 104
Transmission electron microscopy
buffer concepts of ultrathin Si_mGe_n superlattices, 215
characterization of short-period Si_mGe_n superlattices by high-resolution transmission electron microscopy and X-ray diffraction, 221
photoluminescence of SiGe/Si quantum wells prepared by LPCVD, 5
X-ray diffraction
characterization of short-period Si_mGe_n superlattices by high-resolution transmission electron microscopy and X-ray diffraction, 221
experimental study of Si–Ge tetrahedral solid solution in Ni–Co–Mg talcs, 189
photoluminescence and X-ray diffraction study of highly uniform silicon and Ge_xSi_{1-x} epitaxial layers, 46